REMARKS

Summary of the Office Action

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as being fully anticipated by "Stoichiometric $LiTaO_3$ for dynamic holography in the near UV wavelength range" to Furukawa et al. (hereinafter "Furukawa").

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as being fully anticipated by STN Abstract of Kitamura "Breakthrough in ferroelectric single crystals for optical applications control of non-stoichiometric defects" to Kitamura (hereinafter "Kitamura").

Claims 1-7 and 9-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 2001-004801 to Kitamura et al. (hereinafter "JP '801").

Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '801, Furukawa or Kitamura in view of U.S. Patent No. 5,440,669 to Raklujic et al. (hereinafter "Raklujic").

Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '801, Furukawa or Kitamura in view of Raklujic and further in view of U.S. Patent Publication No. 2002/0176126 to Psaltis et al. (hereinafter "Psaltis").

Summary of the Response to the Office Action

Applicants have amended claims 1, 4 and 7 in order to differently describe embodiments of the disclosure of the instant application and/or to improve the form of the claims. Accordingly, claims 1-10 remain currently pending and under consideration.

Rejections under 35 U.S.C. §§ 102(b) and 103(a)

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as being fully anticipated by Furukawa. Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as being fully anticipated by Kitamura. Claims 1-7 and 9-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '801. Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '801, Furukawa or Kitamura in view of Raklujic. Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '801, Furukawa or Kitamura in view of Raklujic and further in view of Psaltis. Applicants have amended claims 1, 4 and 7 in order to differently describe embodiments of the disclosure of the instant application and/or to improve the form of the claims. To the extent that these rejections might be deemed to apply to the claims as newly-amended, they are respectfully traversed for at least the following reasons.

Examiner Angebranndt is thanked for the helpful suggestions at page 3, lines 1-2 and 16-17 of the Office Action. Applicants have opted to proceed with the Examiner's suggested amendments in each of independent claims 1, 4 and 7 of the instant application. In particular, the Examiner suggested that "[t]he applicant may also wish to limit the claims to materials, which have not undergone a reduction treatment and are undoped."

Accordingly, Applicants consider that the rejection of claims 1-10 under 35 U.S.C. §§ 102(b) and 35 U.S.C. 103(a) have been rendered moot by the amendments to the independent claims, and at least for the following reasons.

More particularly, with respect to the items 3 and 4 at pages 2-3 of the Office Action, Applicants respectfully submit that both Furukawa and Kitamura, cited in connection with the rejections under 35 U.S.C. 102(b), fail to disclose or suggest at least the claimed lithium tantalate single crystal with the composition $Li_2O/(Li_2O + Ta_2O_5) = 0.4966$ to 0.4995, which has not

undergone a reduction treatment and is not doped. The Examiner notes at page 3, lines 12-13 that "applicant may wish to submit a copy, with a translation if possible, to increase the pace of prosecution (in case a copy cannot be obtained by the examiner)." To the extent that the Examiner has not been able to obtain a copy of the subject documents and the Examiner has a desire for Applicants to attempt to obtain these documents for submission to the Examiner, the Examiner is requested to specifically indicate such in the next Office Communication.

Turning to the item 5 at pages 3-4 of the Office Action, namely the rejection of claims 1-7 and 9-10 under 35 U.S.C. § 103(a), Applicants respectfully submit that the cited JP '801 reference does not disclose nor suggest the claimed lithium tantalate single crystal having the claimed composition, which has not undergone a reduction treatment and is not doped.

Applicants respectfully submit that, as a matter of course, those skilled in the subject art would never have been able to conceive the lithium tantalate single crystal having the claimed feature as a material suited for the two-color holographic recording.

With respect to the item 6 at pages 4-5 of the Office Action, Applicants respectfully submit that the secondary reference Raklujic merely discloses an optical filter. Thus, even assuming, strictly arguendo, that one might be led to combine the subject features disclosed by Raklujic with to the disclosure of JP '801, Furukawa or Kitamura, as asserted by the Office Action, Applicants respectfully submit that a resultant feature would still be clearly different from the combinations of features described in each of the newly-amended independent claims 1, 4 and 7.

Turning to the item 7 at page 5 of the Office Action, Applicants respectfully submit that the secondary reference Psaltis merely discloses a multi-channel wavelength filter. Thus, even assuming, strictly arguendo, that one might be led to combine the subject features disclosed by

Psaltis to the disclosure of JP '801, or Furukawa, and Raklujic, as asserted by the Office Action, Applicants respectfully submit that a resultant feature would be clearly different from the combinations of features described in each of the newly-amended independent claims 1, 4 and 7.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. §§ 102(b) and 103(a) should be withdrawn because none of Furukawa, Kitamura, JP '801, Raklujic and Psaltis, whether taken singly or combined, teach or suggest each feature of newly-amended independent claims 1, 4 or 7 of the instant application. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Also, MPEP § 2143.03 instructs that "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 409 F.2d 981, 180 USPQ 580 (CCPA 1974)." Furthermore, Applicants respectfully assert that the dependent claims are allowable at least because of their dependence from newly-amended independent claim 1, 4 or 7, and the reasons set forth above.

CONCLUSION

In view of the foregoing, Applicants submit that the pending claims are in condition for allowance. Applicants respectfully request the timely allowance of these claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

DRINKER BIDDLE & REATH LLP

Dated: March 7, 2007 By: _____

Paul A. Fournier
Reg. No. 41,023

Customer No. 055694
DRINKER BIDDLE & REATH LLP
1500 K Street, N.W., Suite 1100
Washington, DC 20005-1209
Tel.: (202) 842-8800
Fax: (202) 842-8465